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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,834	10/22/2003	Kouji Yamada	023971-0332	4241
22428	7590	10/19/2005		
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER HARRIS, KATRINA B	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,834

Applicant(s)

YAMADA ET AL.

Examiner

Katrina B. Harris

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The following is a first action on the merits of application serial no. 10/689,834 filed October 22, 2003.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Specification

The disclosure is objected to because of the following informalities: In lines 20, 28 and 31 of page 9, "3" should be -2-. In line 17 of page 24, "3" should be -2-. In line 3 of page 21, "30" should be -28-. In line 27 of page 28, "3" should be -2-. In line 29 of page 33, "2" should be -8-.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3747

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ichikawa et al. (6,158,415). Ichikawa et al., with **regard to claim 1**, discloses a vibration damping engine mount for an internal combustion engine, comprising:

a vibration controllable support mechanism (31) that supports the internal combustion engine (1) thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of the internal combustion engine thereon;

a varying air pressure supply section (43) that supplies a varying air pressure to the vibration controllable support mechanism; and an introduction section (45) that introduces one of a negative pressure developed in a negative pressure pump and the atmospheric pressure (44) into the vibration controllable support mechanism (31) in accordance with the vibration of the internal combustion engine.

With reference to the use of “one of “...”and” the prior art supports the claimed subject matter in this claim and subsequent claims without the presence of a negative pressure pump.

Regarding claim 2, a vibration damping engine mount for an internal combustion engine, comprising:

a vibration controllable support mechanism (31) that supports the internal combustion engine (1) thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of the internal combustion engine

thereon; and a varying air pressure supplying section that supplies a varying air pressure to the vibration controllable support mechanism, the varying air pressure supplying section including a negative pressure pump to develop a negative pressure and an introduction section (43) that introduces either one of the negative pressure developed the negative pressure pump and the atmospheric pressure into the vibration controllable support mechanism in accordance With the vibration of the internal combustion engine.

Regarding claim 3, wherein the introduction section comprises: an atmospheric pressure introduction passage into which the atmospheric pressure is introduced and which is communicable with the vibration controllable support mechanism; a negative pressure introduction passage into which the negative pressure developed in the negative pressure pump is introduced and which is communicable with the vibration controllable support mechanism (31); and a passage communication control section that controllably communicates either one of the atmospheric pressure introduction passage (44) and the negative pressure introduction passage (45) with the vibration controllable support mechanism (31) in accordance with the vibration of the internal combustion engine (1).

Regarding claim 4, a vibration damping engine mount for an internal combustion engine having an intake air passage, comprising:
a vibration controllable support mechanism (31) that supports the internal combustion engine (1) having the intake air passage (18) thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of

Art Unit: 3747

the internal combustion engine (1) thereon; and an introduction section that introduces either one of the atmospheric pressure or a positive pressure developed within the intake air passage in accordance with a driving condition of the engine and the negative pressure developed in a negative pressure pump in accordance with the vibration of the internal combustion engine.

Regarding claim 9, a vibration damping engine mount for an internal combustion engine (1) having an intake air passage (18) comprising:
a vibration controllable support mechanism (31) that supports the internal combustion engine having the intake air passage thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of the internal combustion engine thereon;
a varying air pressure supplying section that supplies the varying air pressure to the vibration controllable support mechanism; and an introduction section that develops a positive or negative pressure the intake air passage in accordance with a driving condition of the internal combustion engine and introduces either one of the air pressure developed in the intake air passage and the atmospheric pressure into the vibration controllable support mechanism (31) accordance with the vibration of the internal combustion engine.

Regarding claim 10, a vibration damping engine mount for an internal combustion engine having an intake air passage, comprising:
a vibration controllable support mechanism (31) that supports the internal combustion engine (1) having the intake air passage thereon and develops a damping vibration in

accordance With a variation in an air pressure supplied thereto against a vibration of the internal combustion engine thereon;

a varying air pressure supplying section that supplies a varying air pressure to the vibration controllable support mechanism; and a positive and negative pressure developing section that develops a positive pressure or a negative pressure in the intake air passage accordance with the driving condition of the internal combustion engine, the varying air pressure supplying section including an introduction section (43) that introduces either one of the air pressure developed in the intake air passage by means of the positive and negative pressure developing section and the atmospheric pressure into the vibration controllable support mechanism in accordance with the vibration of the internal combustion engine.

(See Figures 1, 3, 47 and 48, which shows the details of the prior art invention as it relates to the claims.)

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. (6,158,415) in view of Funahashi et al. (5,246,212).

Regarding claim 5, Ichikawa et al. (6,158,415) discloses a vibration damping engine mount for an internal combustion engine having an intake air passage, comprising:

a vibration controllable support mechanism that supports the internal combustion engine having the intake air passage thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of the internal combustion engine thereon; a varying air pressure supplying section that supplies a varying air pressure to the vibration controllable support mechanism; and a positive pressure developing section that develops a positive pressure within the intake air passage in accordance with the driving condition of the internal combustion engine, the varying air pressure supplying section comprising: an introduction section that introduces either one of the atmospheric pressure or a positive pressure developed in the intake air passage by means of the positive pressure developing section and the negative pressure developed into the vibration controllable support mechanism in accordance with the vibration of the internal combustion engine.

Ichikawa et al. does not disclose a negative pressure pump that develops a negative pressure therein.

Funahashi et al. discloses a vacuum source (162). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ichikawa et al to include a vacuum source/negative pressure pump. It is well known in the art that a vacuum source includes a pump. The motivation to do so is to provide negative pressure when the engine is off.

Regarding claim 14, a vibration damping engine mount for an internal combustion engine, comprising:
a vibration controllable support mechanism that supports the internal combustion engine thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of the internal combustion engine thereon; varying air pressure supply means for supplying a varying air pressure to the vibration controllable support mechanism; and introduction means for introducing one of a negative pressure and the atmospheric pressure into the vibration controllable support mechanism in accordance with the vibration of the internal combustion engine.

Ichikawa et al. does not disclose a negative pressure pump that develops a negative pressure therein.

Funahashi et al. discloses a vacuum source (162). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ichikawa et al to include a vacuum source/negative pressure pump. It is well known in the art that a vacuum source includes a pump. The motivation to do so is to provide negative pressure when the engine is off.

Regarding claim 15, a method applicable to a vibration damping engine mount for an internal combustion engine the vibration damping engine mount comprising a vibration controllable support mechanism that supports the internal combustion engine thereon and develops a damping vibration in accordance with a variation in an air pressure supplied thereto against a vibration of the internal combustion engine thereon and the method comprising:

Art Unit: 3747

supplying a varying air pressure the vibration controllable support mechanism; and introducing one of a negative pressure and the atmospheric pressure into the vibration controllable support mechanism (31) in accordance with the vibration of the internal combustion engine.

Ichikawa et al. does not disclose a negative pressure pump that develops a negative pressure therein.

Funahashi et al. discloses a pressure pump/vacuum source (162). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ichikawa et al to include a vacuum source/negative pressure pump. It is well known in the art that a vacuum source includes a pump. The motivation to do so is to provide negative pressure when the engine is off.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 11, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. (6,158,415) in view of Fledersbacher et al. (6,378,307).

Regarding claim 6, Ichikawa et al. (6,158,415) wherein the positive pressure developing section is disposed in the intake air passage and increases an intake air quantity of the internal combustion engine and, when the turbo charger increases the intake air quantity of the internal combustion engine in accordance with the driving condition of the engine, the positive pressure is developed at a downstream side in the intake air passage.

Ichikawa et al. does not disclose a turbo charger.

Fledersbacher et al. discloses a turbo charger ((2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a turbo charger in the invention of Ichikawa et al. to improve combustion of the engine.

Regarding claim 11, wherein the positive and negative pressure developing section comprises a turbo charger that is disposed in the intake air passage and increases an intake air quantity of the internal combustion engine and a throttle valve that is disposed in the intake air passage and adjusts the intake air quantity of the internal combustion engine, when the turbo charger increases the intake air quantity of the internal combustion engine in accordance with the driving condition of the engine, the positive pressure is developed at a downstream side and, when the throttle valve limits the intake air quantity of the internal combustion engine in accordance with the driving condition of the engine, the negative pressure is developed at the downstream side of the throttle valve.

Ichikawa et al. does not disclose a turbo charger.

Fledersbacher et al. discloses a turbo charger ((2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a turbo charger in the invention of Ichikawa et al. to improve combustion of the engine.

Regarding claim 12, A vibration damping engine mount for an internal combustion engine having an intake air passage as claimed in claim wherein the introduction section comprises: a positive pressure introduction passage that is branched from a downstream side of the turbo charger in the intake air passage and is communicable with the vibration controllable support mechanism; a negative pressure introduction passage that is branched from the downstream side of the throttle valve and is communicable with the vibration controllable support mechanism; an atmospheric pressure introduction passage into which the atmospheric pressure is introduced and is communicable with the vibration controllable support mechanism; and a passage communication control section that selects one of the positive pressure introduction passage and the negative pressure introduction passage in accordance with a driving state of the internal combustion engine and controllably communicates either one of the selected introduction passage and the atmospheric pressure introduction passage in accordance with the vibration of the internal combustion engine.

Ichikawa et al. does not disclose a turbo charger.

Fledersbacher et al. discloses a turbo charger ((2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a turbo charger in the invention of Ichikawa et al. to improve combustion of the engine.

Regarding claim 13, wherein the introduction section comprises: a positive-and-negative pressure introduction passage that is branched from a downstream side of the throttle valve in the intake air passage and is communicable with the vibration controllable support mechanism; an atmospheric pressure introduction passage into which the atmospheric pressure is introduced; and a passage communication control section that controllably communicates either one of the positive-and-negative pressure introduction passage and the atmospheric pressure introduction passage with the vibration controllable support mechanism in accordance with the driving condition and the vibration of the internal combustion engine.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. (6,158,415) in view of Funahashi et al. (5,246,212) and further in view of Fledersbacher et al. (6,378,307).

Ichikawa et al., with **regard to claim 7**, discloses the claimed invention except a negative pressure pump. Funahashi et al. discloses a negative pressure pump/vacuum source (162). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ichikawa et al to include a vacuum source/negative pressure pump. It is well known in the art that a vacuum source includes a pump. The motivation to do so is to provide negative pressure when the engine is off.

Regarding claim 8, Ichikawa et al. discloses the claimed invention except a turbo charger.

Fledersbacher et al. discloses a turbo charger ((2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a turbo charger in the invention of Ichikawa et al. to improve combustion of the engine.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,167,860 issued to Tsukamoto is a similar system having a vibration controllable support mechanism.

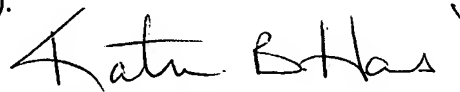
Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katrina B. Harris whose telephone number is 571-272-4842. The examiner can normally be reached on 6:30 AM -3:00 PM.

Art Unit: 3747

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 571-272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Katrina B. Harris
Examiner
Art Unit 3747

KBH



Henry C. Yuen
Supervisory Patent Examiner
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